

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1 (Currently Amended): A phosphocalcic compound, having  
~~characterized in that it has~~ the following chemical composition:

$$\text{Ca}_{(10-a)} (\text{Mg, K, Na})_b (\text{PO}_4)_{6-c} (\text{HPO}_4, \text{CO}_3)_d (\text{OH})_{2-e} (\text{F, Cl, CO}_3)_f [(\text{OA}) (\text{OE}) \text{P} (\text{O})$$
  
$$-\text{CR}^1\text{R}^2-\text{P}(\text{O}) (\text{OA}) (\text{OE})]_g$$
, in which  $0 < a < 9$ ;  $0 < b < 2$ ;  $0 < c < 5$ ;  $0 < d < 2$ ;  $0 < e < 2$ ;  $0 < f < 2$ ;  
 $g < 0.5$ , A and E represent H, an alkali metal, an alkaline-earth metal or nothing,  $\text{R}^1$   
represents H, OH or a halogen and  $\text{R}^2$  represents an element chosen from a  
hydrogen, a halogen, an alkyl radical, an aminoalkyl radical in which the amino group  
optionally bears an alkyl substituent, an alkylamino radical, an alkyl radical bearing  
an aromatic substituent comprising at least one N atom wherein the aromatic  
substituent is not imidazolyl or pyridyl, and an alkyl radical bearing an aromatic  
thioether group.

Claim 2 (Currently Amended): The compound as claimed in claim 1, wherein  
~~characterized in that~~  $\text{R}^1$  and/or  $\text{R}^2$  represent Cl.

Claim 3 (Currently Amended): The compound as claimed in claim 1, wherein  
~~characterized in that~~  $\text{R}^2$  is a radical containing from 1 to 6 carbon atoms.

Claim 4 (Currently Amended): The compound as claimed in claim 1, wherein ~~characterized in that~~  $R^2$  is an aminoalkyl radical  $NH_2(CH)_n-$  in which n is less than 6.

Claim 5 (Currently Amended): The compound as claimed in claim 1, wherein ~~characterized in that~~  $R^2$  is an alkylaminoalkyl radical  $R'R''N(CH_2)_m-$  in which  $R'$  and  $R''$  represent, independently of each other, H or an alkyl radical containing up to 5 carbon atoms, and m is less than 6.

Claim 6 (Currently Amended): The compound as claimed in claim 1, wherein ~~characterized in that~~  $R^2$  is an alkylamino radical  $R^cNH-$  in which  $R^c$  is a cycloalkyl containing from 3 to 7 carbon atoms.

Claim 7 (Canceled)

Claim 8 (Currently Amended): The compound as claimed in claim 1, wherein ~~characterized in that~~  $R^2$  is an alkyl radical containing up to 3 carbon atoms and bearing a phenylthio group in which the phenyl group optionally bears a halogen substituent.

Claim 9 (Currently Amended): The compound as claimed in claim 1, wherein ~~characterized in that~~  $R^1$  is OH,  $R^2$  is  $-CH_2$ -imidazole, A and C represent H.

Claim 10 (Currently Amended): A process for preparing a modified phosphocalcic compound as claimed in claim 1, comprising ~~characterized in that it~~

~~consists in~~ adding a gem-biphosphonic acid or an alkali metal or alkaline-earth metal salt thereof to a suspension of a precursor phosphocalcic compound in ultrapure water, stirring the reaction medium at room temperature and then recovering the formed compound therefrom by centrifugation.

Claim 11 (Currently Amended): The process as claimed in claim 10, wherein ~~characterized in that~~ the compound formed is purified by washing with ultrapure water, followed by filtering and drying in air at room temperature.

Claim 12 (Currently Amended): The process as claimed in claim 10, wherein ~~characterized in that~~ the precursor phosphocalcic compound is chosen from calcium orthophosphates with a solubility in water of greater than  $4 \times 10^{-59} \text{ mol.l}^{-1}$ .

Claim 13 (Currently Amended): The process as claimed in claim 12, wherein ~~characterized in that~~ the phosphocalcic compound is chosen from BCP, CDA, which is a calcium-deficient hydroxyapatite, and  $\beta$ -TCP.

Claim 14 (Currently Amended): The process as claimed in claim 10, wherein ~~characterized in that~~ the stirring at room temperature is maintained for a period of between 1 hour and 72 hours.

Claim 15 (Currently Amended): The process as claimed in claim 10, wherein ~~characterized in that~~ the acids or salts used as gem-biphosphonic compounds correspond to the formula  $(\text{OY}) (\text{OX}) \text{P} (\text{O}) -\text{CR}^1\text{R}^2-\text{P}(\text{O}) (\text{OX}) (\text{OY})$  in which X and Y

represent, independently of each other, H or an alkali metal or alkaline-earth metal cation,  $R^1$  represents H, OH or a halogen, and  $R^2$  represents:

- a hydrogen or a halogen,
- an alkyl radical,
- an aminoalkyl radical in which the amino group optionally bears an alkyl substituent,
- an alkylamino radical,
- an alkyl radical bearing an aromatic substituent comprising at least one N atom, or
- an alkyl radical bearing an aromatic thioether group.

Claim 16 (Currently Amended): A composition ~~that may be used~~ suitable for use by injection for the treatment of osteoporosis or relapses of lytic tumors by inhibition of osteoclast activity, ~~characterized in that it consists of~~ comprising a suspension of the modified phosphocalcic compound as claimed in claim 1, in a biocompatible gel or solution having a viscosity that allows the transportation of granules of between 40  $\mu\text{m}$  and 500  $\mu\text{m}$  in size.

Claim 17 (Currently Amended): The composition as claimed in claim 16, wherein ~~characterized in that~~ the biocompatible gel is a hydrogel of biological interest.

Claim 18 (Currently Amended): The composition as claimed in claim 17,  
wherein characterized in that the gel is a cellulose-based hydrogen or a hydrogel  
based on sodium hyaluronate.